

AMENDMENTS TO THE CLAIMS:

1. (currently amended): A radio communication system for performing radio communication control having frames with a plurality of transmit and receive time slots and guard intervals between said receive time slots, comprising:

a propagation information calculation device including continuous receive time slot allocating means for allocating to a terminal unit more than one receive time slot in a frame to generate from the more than one receive time slot a continuous receive time slot, which includes a continuous receive portion and a continuous guard bit portion for the terminal unit, and propagation information calculating means for communicating with the terminal unit during a period of the continuous time slot to calculate propagation information about radio wave propagation between a radio base station and the terminal unit; and

a transmission timing calculation device including transmission timing calculating means for calculating, during the period of the continuous time slot and based on the propagation information, transmission timing for a signal to be transmitted from the terminal unit to the radio base station, and signal transmitting means for transmitting the signal in accordance with the transmission timing,

wherein to calculate the propagation information, said propagation information calculating means measures a time from transmission of test data to the terminal unit to reception of the test data returned from the terminal unit, and calculates at least one of a radio wave propagation time and distance between the radio base station and the terminal unit, and

said continuous receive time slot allocating means cancels allocation of the continuous receive time slot after the transmission timing is calculated.

2. (cancelled):

3. (original): The radio communication system according to claim 1, wherein said transmission timing calculation device stores information on the calculated transmission timing in a nonvolatile memory.

4. (cancelled):

5. (currently amended): A propagation information calculation device arranged in a radio base station for calculating radio wave propagation information utilizing frames with a plurality of transmit and receive time slots and guard intervals between said receive time slots, comprising:

continuous receive time slot allocating means for allocating to a terminal unit more than one receive time slot in a frame to generate from the more than one receive time slot a continuous receive time slot, which includes a continuous receive portion and a continuous guard bit portion for the terminal unit; and

propagation information calculating means for communicating with the terminal unit during a period of the continuous time slot to calculate the radio wave propagation information about radio wave propagation between the radio base station and the terminal unit.

6. (currently amended): A transmission timing calculation device arranged in a terminal unit for calculating transmission timing for a signal and utilizing frames with a plurality

of transmit and receive time slots and guard intervals between said receive time slots,  
comprising:

transmission timing calculating means for calculating, during a period of a continuous time slot generated by allocating to the terminal unit more than one transmit time slot and more than one receive time slot in a frame, the more than one receive time slot generating a continuous receive time slot including a continuous receive portion and a continuous guard bit portion, transmission timing for a signal to be transmitted from the terminal unit to a radio base station in accordance with propagation information about radio wave propagation between the radio base station and the terminal unit; and

signal transmitting means for transmitting the signal in accordance with the transmission timing.

7. (currently amended): A radio communication method for performing radio communication control having frames with a plurality of transmit and receive time slots and guard intervals between said receive time slots, comprising:

allocating to a terminal unit more than one receive time slot in a frame to generate a continuous receive time slot for the terminal unit, said continuous receive time slot includes a continuous receive portion and a continuous guard bit portion;

communicating with the terminal unit during a period of the continuous time slot to calculate propagation information about radio wave propagation between a radio base station and the terminal unit;

calculating, during the period of the continuous time slot and based on the propagation information, transmission timing for a signal to be transmitted from the terminal unit to the radio base station; and

transmitting the signal in accordance with the transmission timing,

wherein to calculate the propagation information, a time from transmission of test data to the terminal unit to reception of the test data returned from the terminal unit is measured to calculate at least one of a radio wave propagation time and distance between the radio base station and the terminal unit.

8-15. (canceled):